



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/724,296	11/28/2000	Paul W. Doetsch	25-98A	4866

7590

01/29/2002

GREENLEE, WINNER AND SULLIVAN, P.C.  
Suite 201  
5370 Manhattan Circle  
Boulder, CO 80303

EXAMINER

WALICKA, MALGORZATA A

ART UNIT

PAPER NUMBER

1652

DATE MAILED: 01/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/724,296

Applicant(s)

DOETSCH ET AL.

Examiner

Malgorzata A. Walicka

Art Unit

1652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *See Continuation Sheet*.

Continuation of Attachment(s) 6). Other: Copies of the publications quoted and sequence search.

The examiner acknowledges the application. Claims 1-20 are pending and are the subject of examination on merits. Claims 1-15 are withdrawn from consideration as directed to the nonelected invention.

### **Detailed Office Action**

#### ***I. Restriction election***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Group I: claims 1-6 drawn to DNA, and expression vector, encoding truncated ultraviolet damage endonuclease, class 536, subclass 23.1 and 23.2.
- Group II: claims 7-15, drawn to the truncated ultraviolet damage endonuclease and its compositions, classified in class 435, subclass 195.
- Group III: claims 16-20 drawn to a method of cleavage of a double-stranded DNA with endonuclease of group II, classified in class 435, subclass 6.

The inventions are distinct from each other for the following reasons:

Groups I and II are directed to independent chemical entities that have different Structure, chemical and physical properties and biologic functions. These compounds require different search in the patent and non-patent literature as indicated by their different classification.

Art Unit: 1652

Inventions of Group I and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions DNA of Group I and the method of Group III are not disclosed as capable of use together.

Inventions of Group II and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product, the polypeptide of DNA of Group II in a materially different process, such as production of antibodies.

Because the inventions I – III are distinct for the reasons given above, have different classification and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During the telephonic interview on Jan. 11, 2002 with the Applicants' representative Dona Farber a provisional election of claims 16-20 was made with traverse.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

Art Unit: 1652

remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

## **2. Rejections**

### **2.1. 35 USC section 112, second paragraph**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 17 and 19 recite the limitation "the composition of claim 16" and "the composition of claim 18". There is insufficient antecedent basis for this limitation in claims 16 and 18 for these recitations. For examination purposes it is assumed that claim 17 and 19 should recite "the method of claim 16" and "the method of claim 18".

### **2.2. 35 USC section 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 16, 18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by the following publications, of which the first two are included in the Information Disclosure Statement:

- (1) Takao et al, *Nucleic Acid Research*, 1996, 24, 1267-1271,

- (2) Yajima et al, *The MBO Journal*, 1995, 14, 2393-2399,
- (3) Bellacosa et al, *Proc. Natl. Acad. Sci. USA*, 1999, 96, 3969-3974  
(published March 1999)
- (3a) Hendrich et al, Identification and characterization of a family of  
mammalian methyl CpG bindings proteins, *Molecular and Cellular Biology*,  
1998, 18, 6538-6547, published Nov. 28, 1998. *hecle*

The claims are directed to a method for enzymatic cleavage a double-stranded molecule that is distorted by irradiation with UV. Six enzymes are recited by the claims among which three, SEQ ID NO:2, AA 230- 828, SEQ ID NO:36 and SEQ ID NO:38 are respectively taught in the above publications:

- 102-* (1) SEQ ID NO:2 AA 230-828 is presented in Figure 2 page 1269; the incision assay for double stranded DNA is set forth on page 1268,
- (2) SEQ ID NO:36 is shown in Figure 2, page 2394; two versions of incision methods are presented on page 2399,
- priority of 38* (3) SEQ ID NO:38 is presented in Figure 2, page 3972; the method for DNA cleavage is described on page 3970,
- (3a) SEQ ID NO: 38 is not in full length shown in the paper, but it has the Genbank accession AF 722250, available to the public on May 1, 1999.

Although Applicants claim priority right to two provisional applications: No. 60/088521, filed on June 8, 1998 and No. 60/134752 filed on May 18, 1999, none of the provisional applications contains SEQ ID NO:38, therefore priority date for this invention is the date of filing of the instant application, which is Nov. 28, 2000.

### **3. Conclusion**

#### **No claim is allowed**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Malgorzata A. Walicka, Ph.D., whose telephone number is (703) 305-7270. The examiner can normally be reached Monday-Friday from 10:00 a.m. to 4:30 p.m.


If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy, Ph.D. can be reached on (703) 308-3804. The fax number for this Group is (703) 305-3014.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionists whose telephone number is (703) 308-0196.

Malgorzata A. Walicka, Ph.D.

Art Unit 1652

Patent Examiner

  
PONNATHAPURACHUTAMURTHY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600